

What Is Claimed Is:

1. A computer-readable recording medium recording an image display control program for performing control whereby a virtual three-dimensional space consisting of a plurality of three-dimensional models is divided into a grid shape, and the three-dimensional models in the field of view of a virtual camera positioned in the virtual three-dimensional space are transferred to a display memory, with respect to image data of three-dimensional models stored for each block thus divided, and are then displayed on a monitor, the image display control program comprising the steps of:

identifying said block where said virtual camera is positioned;

selecting either three or five mutually adjoining blocks from the blocks adjoining the periphery of the identified block on the basis of at least one of the position information or line of sight direction information for said virtual camera;

reading out the image data for the three-dimensional models in said identified block and selected blocks; and

transferring said image data to a display memory.

2. The computer-readable recording medium according to claim 1, wherein the number of blocks selected from the blocks adjoining the periphery of said identified block is five.

3. The computer-readable recording medium according to claim 1, wherein the number of blocks selected from the blocks adjoining the periphery of said identified block is three.

4. The computer readable recording medium according to claim 3, wherein blocks intersecting with the line of sight direction of said virtual camera, and blocks adjoining said blocks, are selected.

5. The computer readable recording medium according to claim 4, wherein the corner section of said identified block to which said virtual camera is closest is detected, and blocks contacting the detected corner section are selected.

6. A computer-readable recording medium recording an image display control program for performing control whereby a virtual three-dimensional space consisting of a plurality of three-dimensional models is divided into a grid shape, and the three-dimensional models in the field of view of a virtual camera positioned in the virtual three-dimensional space are transferred to a display memory, with respect to image data of three-dimensional models stored for each block thus divided, and are then displayed on a monitor, the image display control program comprising the steps of:

identifying said block where said virtual camera is positioned;

determining whether or not said virtual camera is positioned within a prescribed range from the centre of the identified block;

transferring image data for the three-dimensional models in said identified block to the display memory if the virtual camera is within the prescribed range; and

detecting the corner section of said identified block to which said virtual camera is nearest, selecting three blocks contacting the detected corner section, reading out the image data for the three-dimensional models in said identified block and selected blocks, and transferring said image data to the display memory if the virtual camera is beyond the prescribed range.

7. An image display control device having storing means for dividing a virtual three-dimensional space consisting of a plurality of three-dimensional models into a grid shape and storing image data for the three-dimensional models for each block thus divided, which performs controls whereby the three-dimensional models within the field of view of a

virtual camera situated in the virtual three-dimensional space are transferred to a display memory, and are then displayed on a monitor, the image display control device comprising:

identifying means for identifying said block where said virtual camera is positioned;

selecting means for selecting either three or five mutually adjoining blocks from the blocks adjoining the periphery of the identified block, on the basis of at least one of the position information or line of sight direction information for said virtual camera; and

image processing means for reading out the image data for the three-dimensional models in said identified block and selected blocks from said storing means and transferring same to a display memory.

8. The image display control device according to claim 7, wherein said selecting means selects either three or five mutually adjoining blocks.

9. The image display control device according to claim 7, wherein said selecting means comprises:

determining means for determining whether or not said virtual camera is positioned within a prescribed range from the centre of said identified block;

display means for transferring image data for three-dimensional models within said identified block to a monitor, if the virtual camera is within the prescribed range; and

detecting means for detecting the corner section of said identified block to which said virtual camera is nearest and extracting means for selecting three blocks contacting the detected corner region, if the virtual camera is beyond said prescribed range.

10. An image display control method performing control whereby a virtual three-dimensional space consisting of a plurality of three-dimensional models is divided into a grid shape, and the three-dimensional models in the field of view of a virtual camera positioned in the virtual three-dimensional space are transferred to a display memory, with respect to

image data of three-dimensional models stored for each block thus divided, and are then displayed on a monitor, the image display control method comprising the steps of:

identifying said block in which said virtual camera is positioned;

selecting either three or five mutually adjoining blocks from the blocks adjoining the periphery of the identified block, on the basis of at least one of the position information or line of sight direction information for said virtual camera; and

reading out the image data for the three-dimensional models in said identified block and selected blocks; and

transferring said image data to a display memory.

11. An image display control method performing control whereby a virtual three-dimensional space consisting of a plurality of three-dimensional models is divided into a grid shape, and the three-dimensional models in the field of view of a virtual camera positioned in the virtual three-dimensional space are transferred to a display memory, with respect to image data of three-dimensional models stored for each block thus divided, and are then displayed on a monitor, the image display control method comprising the steps of:

identifying said block in which said virtual camera is positioned;

determining whether or not said virtual camera is positioned within a prescribed range from the centre of the identified block;

transferring image data for the three-dimensional models in said identified block to the display memory, if the virtual camera is within the prescribed range; and

detecting the corner section of said identified block to which said virtual camera is nearest, selecting three blocks contacting the detected corner section, and reading out the image data for the three-dimensional models in said identified block and selected blocks and transferring same to the display memory if the virtual camera is beyond the prescribed range.